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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,600	03/11/2004	Juan-Picr Antonio Spampinato	005127.00270	3894

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EXAMINER

BONANTO, GEORGE P

ART UNIT PAPER NUMBER

2855

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/797,600  
Filing Date: March 11, 2004  
Appellant(s): SPAMPINATO ET AL.

**MAILED**  
JUN 5 - 2006  
**GROUP 2800**

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Spampinato et al.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 28 April 2006 appealing from the Office action mailed 29 March 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is deficient. 37 CFR 41.37(c)(1)(v) requires the summary of claimed subject matter to include: (1) a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number, and to the drawing, if any, by reference characters and (2) for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference characters. The brief is deficient because it fails to explain that the overall shape of housing 20 limits fluid forces (i.e. wind resistance) upon housing 20 due to the movement of air flowing within the wind tunnel, and that overall shape of housing 20 minimizes disturbances of the air flowing within the wind tunnel (page 8, lines 22-25).

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,571,618	Demay et al.	6-2003
3,306,101	Holderer	2-1967
4,501,214	Meyer	2-1985

Mehta et al. "The Aerodynamics of a Tennis Ball" Sports Engineering (2001) 4, 177-189

Bearman et al. "Golf Ball Aerodynamics" Aeronautical Quarterly 27 (1976) 112-122

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 10-12 and 14, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,571,618 to Demay et al. in view of U.S. Patent No. 3,306,101 to Holderer, U.S. Patent No. 4,501,214 to Meyer, and "the aerodynamics of a tennis ball" by Mehta et al.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,571,618 to Demay et al., U.S. Patent No. 3,306,101 to Holderer, U.S. Patent No. 4,501,214 to Meyer, and "the aerodynamics of a tennis ball" by Mehta et al., as applied to claim 10 in further view of "Golf Ball Aerodynamics" by Bearman et al.

Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,571,618 to Demay et al. in view of U.S. Patent No. 3,306,101 to Holderer, and U.S. Patent No. 4,501,214 to Meyer.

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Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,571,618 to Demay et al., U.S. Patent No. 3,306,101 to Holderer, and U.S. Patent No. 4,501,214 to Meyer, as applied to claim 34, in view of “Golf Ball Aerodynamics” by Bearman et al.

Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,571,618 to Demay et al., U.S. Patent No. 3,306,101 to Holderer, and U.S. Patent No. 4,501,214 to Meyer, as applied to claim 34, in view of “The aerodynamics of a tennis ball” by Mehta et al.

#### **(10) Response to Argument**

Appellant argues: a) Demay et al. fail to disclose an airfoil or a rounded leading edge and a tapered trailing edge; b) No proper motivation exists to combine Demay et al., Holderer, and Meyer; c) A combination of Demay et al. and Meyer would render the prior art invention unsatisfactory for its intended purpose; and d) The Examiner relied on impermissible hindsight.

As to the argument that Demay et al. fail to disclose an airfoil or a rounded leading edge and a tapered trailing edge, Demay et al. disclose a streamlined casing (streamlined casing 44; Fig. 3). As described in Appellant’s specification, the airfoil configuration minimizes disturbances of the air flowing within the wind tunnel and minimizes fluid forces on the testing apparatus (page 8, lines 22-25). The streamlined casing of Demay et al. performs these same functions. Thus, to the extent that the streamlined shape of Demay et al. performs the functions that define the airfoil, the streamlined casing is fairly characterized as an airfoil.

In addition, Appellant’s specification fails to provide a definition for the term airfoil that would preclude characterization of the streamlined casing of Demay et al. as an airfoil.

Furthermore, Appellant alleges that “airfoil is a term of art that denotes a particular shape with the ability to control stability, direction, lift, thrust, or propulsion (Appeal Brief; page 4).” Although this definition is not supported by the specification or other evidence as to its accuracy, assuming *arguendo* that the alleged definition is correct, the streamlined casing of Demay et al. is fairly characterized as an airfoil because its shape has the ability to control stability and direction (when aligned with a fluid flow, due to its symmetry) and lift, thrust, or propulsion (by reducing drag).

Finally, the rejection did not rely on Demay et al. disclosing a rounded leading edge and a tapered trailing edge.

As to the argument that no proper motivation exists to combine Demay et al. and Meyer, Appellant admits that the Office Action provided motivation for the combination of Demay et al. and Meyer (Appeal Brief; page 5, lines 18-21). Specifically, the Office Action stated that “it would have been obvious to one of ordinary skill in the art to modify the streamlined casing of Demay et al. by making it the tear-drop shape as taught by Meyer *in order to make the support strong and light* (emphasis added).” Appellant’s arguments that the Examiner failed to prove that the combination would improve the invention of Demay et al. and that the prior art fails to disclose a need for the modification are specious in that no such proof or disclosure is required for a proper combination of references.

As to the argument that the combination of Demay et al. and Meyer would render the support of Demay et al. unsuitable for its intended purpose, the combination would result in a teardrop shaped support that is strong and light. Such a support would not exhibit the deficiencies proposed by Appellant. Each of the support structures of Demay et al. and of Meyer

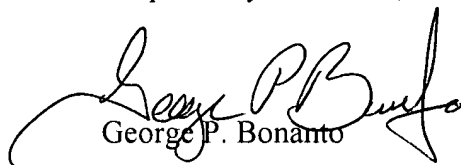
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is strong enough to withstand the forces associated with the high wind environments in which they are intended to be used. Under no circumstances would one of ordinary skill in the art compromise the strength of the support of the streamlined support of Demay et al. when modifying it to include the rounded leading edge (or tear-drop shape) of Meyer when the purpose of the modification is to make the support strong and light.

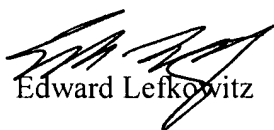
As to the argument that the Examiner relied on impermissible hindsight in construction of the rejection, in each case where a combination was made, a description of the nature of the modification and motivation for such modification was provided. Where the motivation is provided in the prior art, as cited in the Office Action, improper hindsight could not have guided the Examiner.

For the above reasons, it is believed that the rejections should be sustained.

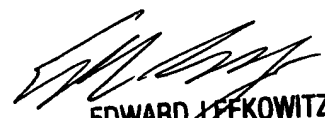
Respectfully submitted,

  
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